

## Optical Wireless Communication System with Multiple Receivers

### ABSTRACT

A cellular optical wireless network 10 includes multiple bi-directional point-to-point links  
5 between a central hub 12 and dispersed clients 14. When the hub 14 is limited in size, the receivers  
may be in close proximity to one another. In this case, the optical signal from two or more clients,  
which may have spread significantly in diameter due to angular spread in the transmitted light, may  
overlap spatially at the hub, causing interference and difficulty in separating the data. The present  
invention provides techniques to avoid such interference.

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